

REMARKS

Claims 1-4 are pending in this application of which claim 1 has been amended. Claim 2 has been canceled. Claim 1 has been amended to incorporate the elements of original claim 2 as well as subject matter found at page 4, lines 14-26.

Applicants' Response to the Rejection under 35 USC 112

Claims 1-4 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention, and under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. In response thereto, Applicants have amended claim 1 to more distinctly claim the subject matter of the invention. Specifically, Applicants have replaced “a set tonnage” with “a tonnage set as a capacity which can pass a maximum flow rate.”

Applicants respectfully submit that “a flow rate corresponding to a tonnage set as a capacity which can pass a maximum flow rate” is sufficiently distinct because a reasonable explanation of the term is set forth in the specification. Specifically, at page 4, lines 14-26, there is described that the capacity of the expansion valve is expressed in tonnage, and that the tonnage is set depending on the vehicle. In regard to the rejection under paragraph 2 of §112, the specification states that the flow rate of refrigerant flowing through the expansion valve is determined and the valve is designed so that at least the flow rate corresponding to the set tonnage is guaranteed. Further, detailed examples of ton type relation to the expansion valve is set forth at page 12, line 9 to page 13, line 16. Wherefore, in light of this amendment to claim 1

and the accompanying remarks, Applicants respectfully request favorable reconsideration and withdrawal of the rejection.

Applicants' Response to the Rejection under 35 USC 103

Claims 1-4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over either the admitted prior art or *Kawakami et al.* Applicants respectfully submit that there are discernable structural differences between the present invention and the cited prior art and the earlier invention of *Kawakami et al.*

Specifically, the limitation of the flow rate range is related to be the change in shape of the center disk. See page 9, lines 11-14, “[t]he center disk 17 has a lower part formed with an increased diameter such that the part radically protrudes outward, and the underside thereof is formed to have a flat surface.” This structural difference can be seen in the center disks, 17 and 117. See Figures 1 and 7 (prior art), and Figures 5(a) and 5(b).

The flow rate claimed can be achieved by the structural formation disclosed. Specifically, page 14, lines 10-13 states “[t]he expansion valve according to the present invention solves this problem by changing the stopper of the center disk from the holder 22 to the lower housing 15 of the power element 13.” Page 14, line 14 to page 16, line 7 provide a further detailed explanation.

Applicants have amended claim 1 by incorporating the limitation of claim 2. Applicants respectfully submit that the elements of claim 2 recite the structural limitation of the center disk. Specifically, “a center disk” is “brought into abutment with an inner wall of a housing” to define “the maximum value lift.”

Response under 37 C.F.R. §1.111
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In light of the amendment and the above remarks, Applicants respectfully request favorable reconsideration.


In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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